gee, pappus bristles usually none; in one head a flower was found with one bristle half as long as corolla and another flower with one bristle about one-fifth as long as corolla. (4) Roseville, T. Brandegee, pappus uniformly none. (5) Forest Hill, Placer County, H. N. Bolander 4579, pappus none in one individual, pappus bristles two or three in other individuals. (6) Fresno County, C. C. Parry 141, pappus none. While so very diverse in pappus character, these various specimens and others of the same general character aggregate naturally as the specific unit, Layia pentachaeta, which in this, its typical form, ranges from Placer County to Fresno County between 500 and 3000 feet. The peculiarity of the rather extreme variations in the pappus characters (each of which is very sharp and definite) suggests the influence of spontaneous crossing. The species flowers in April and May.

Another form likewise inhabits the Sierra Nevada foothills, often growing in the same localities as the form which integrates the botanical type. This second form bears flowers which exhibit 10 to 18 pappus bristles, but aside from pappus, the plants in every other respect, in habit, aspect, pubescence and size, appear to be quite conspecific with the plants of the five-bristled form. It is desirable to define this form by name and it is here called var. HANSENII Jepson n. var. (type Fisher's Cabin, Mokelumne River, Amador Co. foothills, Geo. Hansen 411). This state differs from the botanical type of the species, not merely in number of bristles but also in bearing on the crown (between the bristles) a series of soft and delicate straight hairs, making a sort of basal tuft. It seems likely that this state is the more common of the two. It may well be the primitive state in this whole pentachaeta group, the five-bristled form having been derived from it by reduction. The following collections are noted: (1) Simpson Ranch, Sweetwater Creek, K. Brandegee, pappus bristles about 15. (2) Fisher's Cabin, Mokelumne River, Geo. Hansen 411, pappus bristles about 10 to 14. (3) Folsom, T. Brandegee, pappus bristles about 11 or 12. (4) Merced foothills, Buckminster, pappus bristles about 10; one flower was found that had the 10 bristles common to the other flowers on the plant but was destitute of the short soft hairs.

## NOTES AND NEWS

Commercial exploitation of rare indigenous species of flowering plants takes on each year new and undesirable phases. In 1928 a large number of individuals of the California Pitcher Plant (Darlingtonia californica Torr.), uprooted from their native swamps in the mountains, were offered for sale by street peddlers in central California cities. During one week, in March, 1928, about one thousand such plants were sold in Stockton, according to Mr. J. A. Sanford, a long time member of this Society. The practice is all the more reprehensible in that practically no gardens furnish conditions under which Darlingtonias will thrive.—W. L. J.

Mr. S. B. Parish, well known for his work on the indigenous vegetation of Southern California and for many published papers thereon, died in Berkeley on June 5, 1928, in his ninety-first year.

At the annual meeting of the Society held on Thursday, January 24, 1929 in the Botany Building, Berkeley, the following officers were elected: President, Dr. W. L. Jepson; First Vice-President, Professor W. W. Mackie; Second Vice-President, Mr. H. L. Mason; Treasurer, Miss Elsie M. Zeile.

Dr. Joseph Burtt Davy, one-time a member of the botanical staff at University of California, is now Lecturer in Forest Botany in the Imperial Forestry Institute, University of Oxford, England.

Miss Eileen W. Erlanson, Department of Botany, University of Michigan, who is working upon the chromosome number in the genus Rosa, visited California in October, 1928, in order to make collections of seed and to study the native species systematically in the field. In addition to the living collection at Ann Arbor there is to be formed a supplementary garden collection at Pasadena.

A mimeographed schedule of field trips, March to December, has been prepared by the field committee. For those members who take the field trips it is being sent on request. The chairman is Mr. M. S. Jussel, 473 45th St., Oakland.

Mr. Daniel Cleveland, attorney-at-law and an early day botanical collector in California, who was a correspondent of many systematic botanists, died in San Diego on January 3, 1929.

Mr. Carl Purdy was commissioned in 1928 by private interests to make a garden at Ahwahnee for the purpose of being used as a "plant refuge" for native species of the Yosemite region.

Dr. Francis E. Long of the Desert Laboratory announces (Sci. 69:218) studies of Cereus giganteus which show stomata with functional movement for a century.

"An Annotated Catalogue of the Vascular Plants of Benton County, Washington" has been published by Harold St. John and G. N. Jones in Northwest Science for 1928 (pp. 73 to 93).

The following systematic papers have more recently originated from the Department of Botany at Pomona College: The Potentillas of Southern California, by P. A. Munz and I. M. Johnston (Bull. S. Cal. Acad. Sci. 24: 5-25,—1925). Lonicera and Symphoricarpos in Southern California, by David D. Keck (Bull. S. Cal. Acad. Sci. 25: 1-7,—1926). The Shrubby Malvastrums of Southern California, by F. E. Estes (Bull. S. Cal. Acad. 24: 81-87,—1925). A New Malvastrum, California, by P. A. Munz (Bull. S. Cal. Acad. 24: 88,—1925). Southern California Plant Notes—III, by P. A. Munz (Bull. S. Cal. Acad. 24: 47-51,—1925). Miscellaneous notes on plants of Southern California—IV, by P. A. Munz and I. M. Johnston (Bull. Torr. Club, 52: 221-228,—1925).